

REMARKS

In response to the Office Action dated July 29, 2004, the Applicant has amended independent claims 1, 11 and 18. Claims 1-20 remain in the case. Reexamination and reconsideration of the application, as amended, are requested.

The Office Action objected to the drawings. Namely, FIG. 4 was objected to as not including a reference number ("408") that was included in the specification. In addition, FIG. 7 was objected to as having a reference number ("726") that was not included in the specification.

In response, with regard to the objection of FIG. 1, the Applicant have amended the specification to remove all occurrences in the specification to element 408. In addition, with regard to FIG. 7, the Applicants have amended the specification to add a reference to element 726 to overcome these objections. No new matter has been added. As such, since all of the objections relate to minor inadvertent errors in the specification, changes to the drawings are not necessary.

The Office Action objected to the disclosure due to a minor typographical error.

In response, the Applicant has amended the specification as suggested by the Examiner to overcome this objection.

Claims 1-6, 8-11 and 18-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by Imanka et al. (U.S. Patent No. 6,116,714). Claims 7 and 12-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Imanka et al. in view of Bolash et al. (U.S. Patent No. 6,450,607). Claims 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Imanka et al. in view of Bolash et al. and further in view of Endo (U.S. Patent No. 6,565,185).

The Applicant respectfully traverses these rejections based on the amendments to the claims and the arguments below.

The Applicant's invention includes an ink ejection driver head having a distributive processor integrated within the ink ejection driver head and a correction scheme programmed into the distributive processor, wherein the correction scheme includes intentionally misaligning the ejected ink drops to compensate for known systematic ink drop printing errors.

With regard to the rejections under U.S.C. 102, the Applicants respectfully submit that in contrast to the Examiner's arguments, Imanka et al. do not disclose, teach, or suggest all of the claimed features. For example, the Examiner incorrectly argued that Imanka et al. disclose "a distributive processor 1 integrated with an ink

ejection driver head 12." This is because Imanka et al. disclose in Fig. 1 and at col. 6, lines 26-58 that CPU 1 (the element that the Examiner relates to the Applicants' distributive processor) is external to the printing head, as evidenced by the "I/O interface 2" that resides between the CPU 1 and the printing head 12. Thus, this physical "I/O interface 2" (see Fig. 1 and col. 6, lines 30-43) means the processing driver head cannot be integrated with the printhead, like the Applicants' claimed invention. Further, Imanka et al. clearly does not disclose the Applicants' intentionally misaligning the ejected ink drops. Therefore, since all of the claimed elements are not disclosed in the Imanka et al. reference, the reference cannot anticipate the claims, and hence, the Applicants submit that the rejection should be withdrawn.

With regard to the rejection under U.S.C. 103(a) of the rest of the claims, as argued above, the Applicants submit that the Imanka et al. reference, alone or in combination with the Bolash et al. or Endo reference do not disclose, teach, or suggest the Applicant's distributive processor integrated within the ink ejection driver head and a correction scheme programmed into the distributive processor for intentionally misaligning the ejected ink drops to compensate for known systematic ink drop printing errors.

Specifically, the Examiner incorrectly argued that Bolash et al. disclose the Applicants' intentionally misaligning the ejected ink drops and stated that "the alignment patterns are input numerically by the user into the driver software and processed by an alignment algorithm." However, this is not the same as the Applicants' claimed correction scheme that includes intentionally misaligning the ejected ink drops because unlike Bolash et al., the misalignment of the Applicants' claimed invention is based on known systematic ink drop printing errors and not user input, like Bolash et al.

In addition, even though the combination of Imanka et al. with Bolash et al. or Endo do not produce all of the elements of the claimed invention, these references should not even be considered together since the combination of Imanka et al. with Bolash et al. teaches away from the claimed invention. This is because Bolash et al. explicitly disclose that the purpose of their system and method is to "compensates as nearly as possible for the vertical misalignment of the droplet." As such, if Bolash et al. were to use intentional misalignment as in the Applicants' claimed invention, the main function, purpose and spirit of Bolash et al. would be destroyed. As such, this "teaching away" prevents obviousness from being established by combining these references. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This failure of the cited references, either alone or in combination, to disclose, suggest or

provide motivation for the Applicant's claimed invention indicates a lack of a prima facie case of obviousness (MPEP 2143).

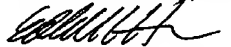
Further, the Examiner took the references out of context and used improper hindsight when he summarily concluded that the references disclose the Applicants' claimed distributive processor integrated within the ink ejection driver head and correction scheme with intentionally misalignment of the ejected ink drops. This is because nowhere in the references is there a disclosure of these features. The Examiner is reminded that the "...combination of elements...in a manner that reconstructs the applicant's invention only with the benefit of hindsight...is insufficient to present a prima facie case of obviousness." There must be some reason, suggestion, or motivation found in the references whereby a person of ordinary skill in the field of the invention would make the combination. **That knowledge cannot come from the applicant's invention itself.** In re Oetiker, 977 F.2d 1443, 24 USPQ 2d 1443, 1446 (Fed. Cir. 1992) [emphasis added].

With regard to the rejection of the dependent claims, because they depend from the above-argued respective independent claims, and they contain additional limitations that are patentably distinguishable over the cited references, these claims are also considered to be patentable (MPEP § 2143.03).

Thus, it is respectfully requested that all of the claims be allowed based on the amendments and arguments. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. Additionally, in an effort to further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (818) 885-1575 if the Examiner has any questions or concerns. Please note that all correspondence should continue to be directed to:

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Respectfully submitted,
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